

Journal of  
**Economics and Political Economy**

[www.kspjournals.org](http://www.kspjournals.org)

Volume 2

March 2015

Issue 1

**Who have been the most harmed by the crisis?  
Evidence from Spain**

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**Abstract.** The aims of this research are to assess the initial impact of the current economic crisis on poverty and social exclusion in Spain and to identify the most vulnerable sectors of society. We apply Probit models to Spanish Income and Living Conditions Surveys of 2007 and 2009 to analyze income poverty and financial functioning of basic material deprivation linking pecuniary and health aspects. Our results show an increment of poverty, above all, extreme poverty, and a worsening of the deprivation risk not only for those with a weaker position in the Spanish labour-market, but for employers and self-employed, as well. In addition, we found changes in risk factors such as educational level and age. These findings should be taken into account when designing the regulatory reforms of social policies and labour market regulations.

**Keywords.** Poverty, Probit models, material deprivation.

**JEL.** I14, I32, I38.

## 1. Introduction

Keynes (1936, 132) highlighted the failure to provide for full employment and the arbitrary and inequitable distribution of wealth and income as outstanding faults of an economic society. His response was to defend government interventions to generate greater levels of income equality and lower poverty rates. But this is a debatable issue for policy makers as the controversy about the measures needed to overcome the current crisis proves. Testing the impact of economic downturns on social well-being could reveal some of the fundamental issues involved in the decision process.

In this sense, Pedersen and Schmidt (2010) find an impact on well-being from the level of income only for a group of Southern European countries. Moreover, according to the existing literature, the effects of the crisis on well-being could depend on the socio-economic characteristics of the country, including income levels and structure and societal norm to work. So, the negative effect to be tested should be deeper for societies with some or several of the following features: higher income levels (Noh, 2009), high long-term unemployment rates (Clark, 2006 & Liem and Rayman, 1982), strong societal injunctive norm to work (Stavrova et al., 2010) and less egalitarian income structure (Karsten and Moser 2009).

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According to the Organisation for Economic Co-operation and Development (2011a), Spain is placed under the OECD average in terms of median equivalized disposable household income but close to it. Its long-term unemployment rate has quickly risen with the economic recession and it is higher than the OECD average. Moreover, the inequality of the Spanish income distribution is higher than the OECD average according to the Gini index (OECD 2011b) and its Mediterranean social model is characterized by a rather low coverage of unemployment benefits (Sapir 2005a; Sapir 2005b) and low levels of social expenditure in contrast with the European context (Ayala Cañón, 2010). Therefore, Spanish society well-being could be severely and quickly hit by the crisis, above all if we take into account that the beginning of the economic downturn brought about a marked and incessant rise of unemployment that stand out when compared to OECD countries and, therefore, it increased tension on public expenditures. A deep controversy on the actions to take on it has been raised and their effect on poverty of the most vulnerable collectives has been brought to the debate. It should be taken into account that the poverty rates in Spain have hardly experienced any change since middle of 90's despite the strength showed by employment until the outbreak of the crisis (Ayala Cañón, 2010). Hence, Spanish society had already a serious social cohesion deficit before the crisis (Laparra, 2010).

As it is well known, poverty is a multidimensional concept, which involves material deprivation, as well as social and cultural deprivation. Income poverty, measured through the percentage of population under the income threshold, is only one of the explanatory factors of material deprivation which could lead to social exclusion, that is, the deprivation of several essential needs of people (see, among others, Ayala Cañón et al., 2011; Nuñez, 2009 and MartínezLópez, 2007). It must be highlighted, at this point, that not all the social exclusion situations result from income poverty circumstances, at least in more severe forms, as social exclusion involves a situation of marginalisation. Moreover, attending to material deprivation, a low income does not always imply a low level of well-being since people or households could receive non-monetary or undeclared incomes or they could use the wealth accumulated in previous periods. Our research focuses on this area.

We link labour market and employment status (variables which clearly reflect the crisis of the Spanish economy), household structure, and social, personal and material resources with the measurement and characterization of income poverty and basic material deprivation risk in financial dimensions. Assessing the impacts of economic downturn on these dimensions and identifying the most vulnerable collectives could shed light on policy decisions in several areas such as labour market, education, unemployment protection system or other social policies such as the health system. In addition, it should be taken into account that, according to Ayllón (2012), in Spain the experience of poverty in a given year increases in itself the chances of experiencing poverty in the future. So, avoiding the onset of poverty should be crucial.

As far as we are aware, only Laparra (2010) and Cantó (2010) have tried to address this issue using data compiled by a survey of Fundación Fomento de Estudios Sociales y de Sociología Aplicada and the Labour Force Survey, respectively. We use the Spanish Income and Living Conditions Surveys of 2007 and 2009. Following Latif (2010), Clark (2006) and Clark & Oswald (1994), we apply Probit regressions to determine the very initial impact of the current crisis on income poverty and on other financial dimensions of the basic needs of multidimensional poverty. We choose to focus our analysis on these features of social exclusion since they are quickly affected by economic downturn and, therefore, they allow us to examine the possible future implications on other

dimensions. At the same time, they link pecuniary and health aspects of well-being including the impossibility of access to medical treatment due to economic reasons. It should be taken into account that the universality of health-care in Spain does not in itself ensure the adequate access to health services for all the social clusters (Arriba, 2008). To analyse the deprivation we have utilized, in addition, the household equivalized income and the capability to deal with unexpected expenses and mortgage or rent payments since housing is crucial to avoid poverty and social exclusion. Ayala Cañón (2008) stressed the upturn of households financial difficulties, especially in what refers to the housing burden, even before economic downturn began.

The remainder of the paper is organized as follows. Section 2 briefly reviews the literature on this field of research. Section 3 explains the intuition behind the methodology and presents the data, and Section 4 discusses the results, while a final section summarizes and concludes.

## 2. The effects of the crisis on poverty and social exclusion: a review of the literature

Financial crisis manifests itself in the real economy through the contraction of the flows of spending, investment, and international trade and, therefore, affects income levels and, as a consequence, the labour markets. Unemployment and job insecurity rise and, hence, poverty levels are affected.

The link between unemployment and poverty has been amply examined in economic literature (Freeman, 2003; Gallie & Paugam, 2001; Hauser & Nolan, 2001; Haveman & Schwabish, 2000; Romer, 2000; Danziger & Gottschalk, 1995; Tobin, 1994; Juárez, 1994; Foerster, 1994; Callan & Nolan, 1994; Blank & Card, 1993; Blank 1993, 1996 and 2000; Cutler & Kantz, 1991; Atkinson, 1989; Blank & Blinder, 1986; Duncan 1984).

In a similar way, OECD (1997) finds that employment status is the most important factor in determining relative income and poverty. Moreover, Kolev (2005) links poverty to unemployment and to job quality and OECD (2007: 50-1) points out that 'the weakness of employment is the main cause of poverty' and 'job insecurity, involving alternating periods of employment and non-employment exposes people to poverty' even though it clarifies that 'employment is not an absolute bulwark against poverty'. Furthermore, Pedraza Avella (2012) following Atkinson (1998), stresses that the increase of precarious workers leads to new categories of people under a risk of deprivation and social exclusion

Nevertheless, apart from poverty, unemployment can have another adverse consequence: the damage to health (Goldsmith et al., 1996; 1997; Liem & Rayman 1982), which could have a bearing on social exclusion risk above all if medical treatments are not affordable. In any case, the negative implications on well-being are not limited to unemployment status. Extreme job insecurity, quality of job, financial and work stress, labour force, employment and hierarchy status, educational level, and job prospect status can affect life satisfaction, subjective mental health, physical health, and well-being of individuals (Green 2010; Pedersen & Schmidt 2010; Latif 2010; Clark, Knabe & Rätzl 2010; Karsten and Moser 2009; Cole et al., 2009; Mustard et al., 2003; Di Tella et al., 2001; Graetz, 1993). In this sense, many studies have shown that socioeconomic status indicators, such as joblessness, income, occupation, and education, are correlated with sickness and mortality (Schmitz 2010; Kuroki, 2010; Stuckler, et al. 2009; Economou et al., 2008; Scutella & Wooden, 2008; Béland et al., 2002; Humphries and Van Doorslaer, 2000; Lynch et al., 2000; Mustard et al., 1997; Korpi, 1997;

Gerlach and Stephan, 1996; Winkelmann & Winkelmann 1998 and 1995; Stefansson, 1991; Svenson, 1987; Jennings et al., 1984; Donovan & Oddy, 1982).

In addition, we have to take into account that, according to Clark (2006), the lower levels of individual well-being due to unemployment depend on unemployment duration. So, the negative effect of unemployment on well-being would be deeper for societies with higher long-term unemployment rates (Liem & Rayman, 1982). Spain is in this category.

For this country, the European Commission states that unemployment is a key driver of poverty (2009, p. 16) and OECD (2009) shows that close to 50% of jobless households in Spain were relatively poor, compared with 37% on average across the OECD. Cantó (1997), Ruiz and Martínez (1994), Escribano (1990), Bosch et al. (1988) and Ruiz (1987) also bind poverty to unemployment in Spain. Nevertheless, Martín Reyes et al. (1989, p. 44) discovered a reduced correlation between poverty and unemployment rate but higher correlation coefficients between poverty and inactivity. Empirical studies also showed that inequality decreased and poverty didn't increase as unemployment rose in Spain (Oliver, et al., 2001; Alonso 1998; Álvarez et al., 1996) owing to the role played by the family on income redistribution (Carabaña & Salido, 2007: 164; García & Toharia 1998; García et al., 1999; Garrido & Toharia, 1996; Ayala Cañón et al., 1996).

More recent literature on the Spanish economy showed, in addition, that temporary contracts, which have greatly increased in number in the last few decades, imply an increment in the poverty risk in not only short-term but in long-term (Ayala, 2008). In this sense, Martínez López (2010) identified long-term unemployment and temporary contracting as factors of basic deprivation vulnerability. Moreover, Ayllón (2012) highlighted the educational level and the occupation status in the labour market as determinants of poverty in 1994-2001 period<sup>1</sup>; whilst Ayala Cañón et al. (2011) stressed the marked influence on poverty risk and multidimensional deprivation exerted by the educational attainment and the labour market status in 2005<sup>2</sup>.

From a territorial perspective, Ayala Cañón (2008) highlighted the significance of the regional dimension of poverty in Spain. More recently, Jurado Málaga and Pérez Mayo (2010) stressed the regional disparities in living conditions of persons and households in Spain and the existence of regional peculiarities which increase the higher poverty risk derived from a different distribution of educational, labour or demographics factors.

This brief review of the literature clearly points out the scarcity of studies on the current Spanish situation and, therefore, stresses the significance of the question tackled by our research: measuring the short-term socioeconomic and well-being effects of the current crisis. Furthermore, it justifies the methodology and the inclusion in our analysis of variables referring to unemployment, occupation status and regional dimensions.

### 3. Methodology and data

As it is well known, an economic crisis, even at the outset, does not affect the whole society equally. Therefore, it is important to assess, before taking shock measures, the intensity of the poverty problem and the collectives most harmed by the downturn, in order to identify factors that could act as protector shields against it.

At this point, we must bear in mind the difference between poverty and inequality: poverty deals with the dissatisfaction of the basic needs of a part of society and inequality focuses on the distance between the society members. It is true that inequality leads to poverty; but it is not the only factor of poverty.

That is, inequality is a cross element of the impoverishment factors (Fresno, 2007). So, before testing the evolution of poverty in Spain, we look for possible inequality changes through the well-known Gini Index. Then, we use the Head account ratio to measure variations on the intensity of income poverty. That is, we check the share of the population whose income is below the poverty thresholds of 60 %, 50% and 30% of the median equivalized income (the latter is computed to evaluate extreme poverty).

To focus on our main purpose, the characterization of most vulnerable collectives, from not only an one-dimensional perspective but from a multidimensional perspective, we carry out Probit models to obtain poverty profiles based on features of individuals such as their level of education, status in the labour market, region of residence, etc. To do this, we have defined the following binary variable that measures if an individual is poor or not

$$p_i = \begin{cases} 1 & \text{if } y_i < z \\ 0 & \text{otherwise} \end{cases}$$

where  $y_i$  is the annual net income of individual  $i$  and  $z$  is the poverty line which is equal to 60% of median equivalized disposable income.

The probability that an individual will be poor is calculated by the Probit model (see Greene, 2002)

$$\text{prob}(p_i = 1) = \Phi(X_i\beta)$$

Where  $X$  is the vector of independent variables that affect this probability and  $\beta$  is the vector of coefficients of the Probit model.

We have applied this methodology to characterise changes in income poor profiles and we have extended our analysis to other financial exclusion dimensions because they affect the basic material needs fulfilment. So, we have estimated two Probit models using as dependent variables the capacity to manage unexpected expenses and the delays in payment of mortgage or rent in the last 12 months. We focus on these variables because these normal, reoccurring activities can be hampered or prevented by the possible fall of income, but the existence of non-monetary or not declared incomes or of the accumulated wealth could maintain the level of well-being in a way that the income fall does not lead to deprivation in these areas. We have completed our analysis estimating a Probit model on the probability of not having access to medical or dental care due to monetary reasons since social exclusion has a health dimension which can be affected by not only falls in income of a person, but social policies restrictions as well. In addition, as previously mentioned, the universality of health-care in Spain does not ensure by itself the adequate access to health services for all the social clusters.

Our data come from Spanish Income and Living Conditions Surveys of 2007 and 2009 in which the income data were collected the year before making the survey and, therefore, they refer to 2006 and 2008. So, they allow us to test the very initial impacts of the economic downturn on the pecuniary and health dimensions of well-being. To focus on the pecuniary dimension of well-being, we have utilized the annual equivalized net income which is calculated using the modified OECD equivalence scale. We express the equivalized net income in constant euros at 2006 prices to make comparisons.

### 4. Results

The financial markets liquidity crisis in the summer of 2008 quickly travelled to the Spanish labour market, which destroyed 2.4% of jobs. Indeed, the unemployment rate reached 13.9% in the last quarter of the year. Nevertheless, the



average equivalized household income was 2.8% higher than that of our reference year in real terms. As the Table 1 shows, Spanish income distribution does not suffer any significant change and the Headcount ratio decreases slightly if we use the 60% of median equivalized disposable income as poverty line. Nevertheless, if we consider the 50% of median equivalized disposable income as threshold, poverty increased by 1.06% in relative terms. An even more worrying fact is the rise of a more profound poverty in Spain (Table 1): the percentage of people under extreme poverty, that is under the 30% of the median of the equivalized household income, increased 25% from 2007 to 2009 according to the Income and Living Conditions Survey. So, the social exclusion risk had risen in the early days of the economic crisis in Spain, at least in its income dimension.

[Table 1]

As these results could mask a change in the poverty profiles, we test the possible influence of the individual labour market status on the probability of being income poor by using Probit regressions on available data. We insert other personal and social variables of individuals in the models too, as it is usual in these kinds of studies. Our results are compiled on the Table 2.

If we pay attention to personal and social characteristics, the results show a decreasing probability of being income poor with respect to the age of the individual in 2007. Moreover, the probability of being income poor increased for divorced or separated people and decreased as the education level of the individuals went up. As regards to individual labour status, people with a part-time job; the wage earners with temporary contracts; employers; self-employed; unemployed who have never worked or have been wage-earners; long-term unemployed and inactive had a higher income poverty risk in Spain.

[Table 2]

Where a person resides has a strong influence on the probability of falling into poverty risk in Spain: Extremadura, the Canary Islands, Castile-La Mancha, Murcia, and Andalusia were the Autonomous Regions with higher marginal effects in 2007 compared to Madrid which has been our reference. Nevertheless, those residing in Navarre or Cantabria showed a lower income poor probability. These Autonomous Regions had their unemployment and inactive rates lower than those of Madrid. Extremadura, the Canary Islands, Castile-La Mancha, Murcia, and Andalusia were in the opposite situation.

Findings for Income and Living Conditions Survey of 2009 data stress the greater protection extended by age against income poverty. This result turns over the conclusion of Ayala Cañón (2010) who pointed out a revival of income poverty amongst elder people in the 15 years previous to the crisis. So, especial attention should be paid to the treatment of public pension system for retirement, above all in crisis time.

In addition, the weakening of the link between higher educational levels and protection against poverty found by Ayala Cañón (2010) for Spain in previous periods is also reversed with the economic downturn. The collectives most hit by job destruction have been those with lesser educational level. So, the distance between categories has widened. At this point, it should be taken into account that almost 45 percent of Spanish workforce has no more than the first level of secondary education<sup>3</sup>, which is the compulsory education level. Therefore, Spain should make a great effort in this area and reform its education system to keep people within it and adapt the teaching to the labour market needs.

On the other hand, workers with part-time jobs suffered a worsening of their vulnerability. The significance of this evolution is clearly evident if one considers that crisis has markedly increased part-time work in Spain. Moreover, the higher probability of being income poor of employers and self-employed has increased

now 7.98 and 3.52 percentage points, respectively. We must take into account that the shortage of financing has hit the Spanish small and medium enterprises hard. Furthermore, all the unemployed categories have suffered an increase of their poverty probability and the inactive group has a higher risk, too.

These results can be better understood if one considers, firstly, the low social cover suffered by self-employed in Spain and, secondly, that the Spanish unemployment benefit varies depending on the contribution made to the system – work days accumulated – and on the prior employment status of the unemployed. Furthermore, the amount of benefit decreases as time goes on. Moreover, others Spanish welfare payments are linked to income being no higher than 75% of the monthly minimum wage and provide no more than 80% of PIMEI (Public Indicator of Multiple Effect Income) which is lower than minimum interprofessional wage. In short, the Spanish unemployment protection system is not capable of preventing poverty risk. Therefore, its revision, along with the reform of active employment policies, is essential.

As far the impact of place of residence on the income poverty probability, we must stress that Navarre performed better than the rest of the Autonomous Regions in 2009. Nevertheless, people from Andalusia, Murcia and the Canary Islands have suffered a growth of their risk by 4.84, 1.56 and 1.03 percentage points, respectively. So, the economic downturn has increased the Spanish regional gaps in poverty terms. The regional disparities in terms of productive structures and labour market could explain this result. Nevertheless, the inability of social decentralization policies designed to narrow the Spanish territorial fractures or, at least, prevent them from increasing, has manifested itself<sup>4</sup>.

The Tables 3 and 4 show the main features of another two dimensions of social exclusion in turn related to income and dwelling: the capacity to cope with unexpected expenses and the delays in payment of mortgage or rent in the last 12 months. These handicaps could isolate people from society, as the problem of an increasing eviction rate has proved in Spain in the last few months.

[Table 3]

Our findings show a weakening of the protection of marriage against the first social exclusion dimension and more difficulties for the divorced and separated individuals, temporary workers, unemployed previously wage-earners, unemployed for more than 6 months, unemployed who had never worked, and inactive people. Moreover, people from the Canary Islands and Andalusia suffered a worsening situation compared with people from Madrid. On the other hand, the educational level provides a stronger shield against this risk and employers and unemployed previously self-employed improve their position.

As far as the delays in payment of mortgage or rent in the last 12 months is concerned (see Table 4), the results highlight a worsening of the status of divorced or separated, part-time workers, temporary contract workers, and unemployed previously self-employed. The probability of delay in these payments grows for those who reside in the Balearic Islands. Nevertheless, education strengthens protection against this social exclusion dimension since university graduates have 4.45% less of probability of falling into it.

[Table 4]

As previously mentioned, social exclusion has a health dimension too. We add it to our analysis (see Table 5) taking into consideration the inability of meeting medical needs owing to economic reasons which has grown from 2.8% in 2007 to 4.2% in 2009.

[Table 5]

In 2009, the risk of health deprivation grew for divorced or separated, unemployed previously self-employed, unemployed previously wage-earners,

and unemployed for more than 6 months: 4.3%, 9.9%, 2.3% and 1.6%, respectively. The level of education shows a higher protection one more time reaching a negative marginal effect of 3.8% for university graduates.

### 6. Conclusions

Economic literature has widely analysed the links between personal and labour market status and well-being levels through income and health dimensions. Both of them are vectors of social exclusion, which reflects the poverty dimensions and the limits in the exercise of basic rights.

Our findings show that, in the first steps of crisis in Spain, although income did not suffer a decrease, the percentage of persons under the threshold of 50% of the median equivalized disposable income grew, and so did extreme poverty. According to our results, separated or divorced, less qualified persons, part-time workers, temporary workers, and unemployed who have never worked were more vulnerable collectives facing income poverty and financial deprivation before the beginning of the crisis. As it could be expected, the first impact of financial depression on the real economy entailed a worsening of the well-being of these groups. In addition, employers, self-employed, inactives, and all unemployed categories, especially unemployed for more than six months, have also suffered a rise of deprivation risk. Furthermore, the crisis has widened the regional disparities and stressed the inadequacies of the design of social policies intended to create territorial convergence. The deficiencies of labour market regulations and unemployment protection system to fight against deprivation risk are evident, as well.

Nevertheless, we should highlight that educational level has become stronger as a protection factor against deprivation in Spain and the elderly have stopped to be a risk collective compared with younger clusters. These last findings constitute significant changes with respect to previous periods and should be taken into account in future social policies reforms, too.

### Endnotes

<sup>1</sup>This research is based on the Spanish component of the European Community Household Panel (1994-2001 period).

<sup>2</sup> This research is based on 2005 Spanish EU-SILC

<sup>3</sup> Data available at <http://www.ine.es> (Labour Force Survey)

<sup>4</sup>It should be taken into account that, in this line, Ayala (2008) had stressed uncertainty about the effect of territorial decentralization of basic social services on inequality and poverty and Jurado Málaga and Pérez Mayo (2010) had realized specific actions to reduce the higher differential risk for a same personal situation derived from a regional factor since territorial convergence only was recorded in Spain in 80's.

### References

- Alonso T. F. J. (dir.) (1998). *Las condiciones de vida de la población pobre en España*. Madrid: FOESSA.
- Álvarez A., Cañón, L. A., Mújika, I. M., López, R. M., Palacio Morena J. I., & Carbonell, J.-R. H. (1996). *La distribución funcional y personal de la renta en España. Un análisis de sus relaciones*. Madrid CES.
- Arriba, A. (2008). *Políticas y bienestar sociales. Procesos de vulnerabilidad y exclusión social*. Madrid: Fundación FOESSA.
- Atkinson, A. B. (1989). *Poverty and social security*. Harvester: Wheatsheaf.
- Atkinson, A. B. (1998). Preface in *Exclusion, Employment and Opportunity*, v-vii. London: Centre for Analysis of Social Exclusion-London School of Economics.
- Ayala C. L. (2010). La pobreza en España tendencias y factores de cambio. *Revista Española del Tercer Sector* 15 (digital version). Fundación Luis Vives.



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- Ayala C. L. (Coord.) (2008). Desigualdad, pobreza y privación. *VI Informe sobre exclusión y desarrollo social en España 2008*, (pp. 87-171). Madrid: Fundación FOESSA.
- Ayala C. L., Jurado A., & Mayo J. P. (2011). Income poverty and multidimensional deprivation: lessons from cross-regional analysis. *Review of Income and Wealth*, 57, 40-60.
- Ayala C. L., Martínez R., & Cuesta, M. (1996). La distribución de la renta en España desde una perspectiva internacional: tendencias y factores de cambio in *La Desigualdad de Recursos*, (pp. 315-440) Madrid: Visor-Argentina.
- Ayllón, S. (2012). Understanding poverty persistence in Spain. *Series*, DOI 10.1007/s13209-012-0089-4.
- Béland, F., Birch S., & Stoddart, G. (2002). Unemployment and health: contextual-level influences on the production of health in populations. *Social Science & Medicine*, 55, 2033-2052.
- Blank, R. M. (1993). Why were poverty rates so high in the 1980s? *Poverty and Prosperity in the USA in the Late Twentieth Century* (pp. 21-55). London: Macmillan.
- Blank, R. M. (1996). Why has economic growth been such an ineffective tool against poverty in recent years? *Poverty and inequality, the political economy of distribution* (pp. 27-41). Kalamazoo: W.E. Upjohn Institute.
- Blank, R. M. (2000). Fighting poverty: lessons from recent U.S. history. *Journal of Economic Perspectives*, 14, 3-19.
- Blank, R. M. & Blinder, A. (1986). Poverty and the Macro Economy. *Challenging Poverty: what works and what doesn't*. Cambridge, MA: Harvard University Press.
- Blank, R. M. & Card, D. (1993). Poverty, Income distribution and growth: are still connected? *Brookings Paper on Economic Activity*, 2, 285-339.
- Bosch, A., Escribano C. & Sánchez, I. (1988). La desigualdad y la pobreza en España I, II, III (1973-81). *Instituto Ortega y Gasset, Papeles de Trabajo*, Universidad Complutense de Madrid.
- Callan, T. & Nolan, B. (1994). Unemployment and poverty. *Poverty and Policy in Ireland*. Dublin: Gill and Macmillan.
- Cantó S. O. (1997). Desempleo y pobreza en la España de los 90. *Papeles de Economía Española* 72, 88-105.
- Cantó S. O. (2010). El impacto de la crisis económica sobre los hogares más desfavorecidos. *Revista Española del Tercer Sector* (digital version) 15. Fundación Luis Vives.
- Carabaña M. J. & Cortés O. S. (2007). Paro, pobreza, estado y familia en España, 1993. *Cuadernos de Relaciones Laborales*, 25, 161-194.
- Clark, A. E. & Oswald, A. J. (1994). Unhappiness and unemployment. *The Economic Journal*, 104, 648-659.
- Clark, A. E. (2006). A note on unhappiness and unemployment Duration. *Discussion Paper Series IZA*, No. 2406. The Institute for the Study of Labor (IZA).
- Clark, A., Knabe A., & Rätzl, S. (2010). Boon or bane? Others' unemployment, well-being and job insecurity. *Labour Economics*, 17, 52-67.
- Cole, K., Daly A., & Mak, A. (2009). Good for the soul: The relationship between work, wellbeing and psychological capital. *The Journal of Socio-Economics*, 38, 464-474.
- Cutler, D. & Katz, W. (1991). Macroeconomic performance and the disadvantaged. *Brookings Papers on Economic Activity*, 2, 1-74.
- Danziger, S. & Gottschalk, P. (1995). *America Unequal*, Harvard University Press, Cambridge, MA.
- Di Tella, R., Macculloch and R., & Oswald, A. (2001). Preferences over inflation and unemployment: Evidence from surveys of happiness. *American Economic Review*, 91, 335-341.
- Donovan, A. & Oddy, M. (1982). Psychological aspects of unemployment: an investigation into the emotional and social adjustment of school leavers. *Journal of Adolescence* 5, 15-30.
- Duncan, G. J. (1984). *Years of poverty, years of plenty*. Ann Arbor, Michigan, Institute for Social Research, Ch.2.

## Journal of Economics and Political Economy

- Economou, A., Nikolau, A., & Theodossiou, I. (2008). Are Recessions Harmful to Health After All? Evidence from the European Union. *Discussion Paper 2007-18*, March 2007, Centre for European Labour Market Research.
- Escribano, C. (1990). Evolución de la pobreza y la desigualdad en España. *Información Comercial Española*, 686, 81-108.
- European C. (2009). EU Employment Situation and Social Outlook. *Monthly Labour Market Monitor*, November.
- Foerster, M. F. (1994). Family poverty and the labour market. An international comparison of labour market participation and working time arrangements based on analysis of microdata from the Luxembourg Income Study. *Luxembourg Income Study Working Paper Series*, 114, July.
- Freeman, D. G. (2003). Poverty and the Macroeconomy: estimates from U.S. regional data. *Contemporary Economic Policy*, 21, 358-71.
- Fresno, J. M. (Coord.) (2007). *Cuaderno Europeo 4. Poniendo en práctica la Estrategia Europea para la Inclusión Social. Del plano europeo al plano local*. Fundación Luis Vives
- Gallie, D. & Paugam, S. (2001). The experience of unemployment in Europe: The Debate. *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford Univ. Press.
- García, M. I., & Toharia, L. (1998). Paro, pobreza y desigualdad en España: análisis transversal y longitudinal. *Ekonomiaz: Revistas de economía*, 40, 134-165.
- García S. C., Garrido, L., & Toharia, L. (1999). Empleo y paro en España: algunas cuestiones candentes. *Las relaciones de empleo en España*. Madrid: Siglo XXI.
- Garrido, L. & Toharia, L. (1996). Paro y desigualdad. *Pobreza, necesidad y discriminación (II Simposio sobre Igualdad y Distribución de la Renta y la Riqueza)*. Madrid: Argenteria-Visor.
- Gerlach, K. & Stephan, G. (1996). A paper on unhappiness and unemployment in Germany. *Economics Letters*, 52, 325-330.
- Goldsmith, A. H., Veum J. R. & Darity, W. J. (1996). The psychological impact of unemployment and joblessness. *Journal of Socio-Economics*. 25, 333-358.
- Goldsmith, A. H., Veum, J. R. & Darity, W. J. (1997). Unemployment, joblessness, psychological well-being and self-Esteem: Theory and evidence. *Journal of Socio-Economics*, 26, 133-158.
- Graetz, B. (1993). Health consequences of employment and unemployment: longitudinal evidence for young men and women. *Soc. Sci. Med.* 36, 715-724.
- Green, F. (2010). Unpacking the misery multiplier: how employability modifies the impacts of unemployment and job insecurity on life satisfaction and mental health. *Journal of Health Economics* doi: 10.1016/j.jhealeco.2010.12.005.
- Greene, W.H. (2002). *Econometric Analysis*. 5<sup>th</sup> edn. Prentice-Hall, NJ.
- Hauser, R., & Nolan, B. (2001). Unemployment and Income Poverty. Change over Time. *Welfare Regimes and the Experience of Unemployment in Europe*. Oxford: Oxford Univ. Press.
- Haveman, R., & Schwabish, J. (2000). Has macroeconomic performance regained its anti-poverty bite? *Contemporary Economic Policy*, 18, 415-27.
- Humphries, K. H., & Van Doorslaer, E. (2000). Income-related health inequality in Canada. *Social Science & Medicine*, 50, 663-671.
- Jennings, S. Mazaik C. & Mckinlay, S. (1984). Women and work: an investigation of the association between health and employment status in middle-aged women. *Soc. Sci. Med.*, 19, 423-431.
- Juárez, M. (Coord.) (1994). *V Informes sobre la situación social de España*. Madrid: FOESSA
- Jurado Málaga, A., & Pérez Mayo, J. (2010). Dimensión territorial de la pobreza en España. *Revista Española del Tercer Sector* (digital version) 15. Fundación Luis Vives.
- Karsten, I. P., & Moser, K. (2009). Unemployment impairs mental health: Meta-analyses. *Journal of Vocational Behaviour*, 74, 264- 282.
- Keynes, J. M. (1936). *The General Theory of Employment Interest and Money*. New York: Harcourt, Brace & World, Inc.
- Kolev, A. (2005). Unemployment, job quality and poverty: a case study of Bulgaria. *International Labour Review*, 144, 85-114.

- Korpi, T. (1997). Is utility related to employment status? Employment, unemployment, labor market policies and subjective well-being among Swedish youth. *Labour Economics*, 4, 125-147.
- Kuroki, M. (2010). Suicide and unemployment in Japan; Evidence from municipal level suicide rates and age-specific suicide rates. *The Journal of Socio-Economics*, 39, 683-691.
- Laparra, M. (2010). *El primer impacto de la crisis en la cohesión social de España. Un análisis provisional a partir de las Encuestas FOESSA 2007-2009*. FOESSA and Cáritas
- Latif, E. (2010). Crisis, unemployment and psychological wellbeing in Canada. *Journal of Policy Modeling*, 32, 520-530.
- Liem, R., & Rayman, P. (1982). Health and social cost of unemployment: Research and policy consideration. *American Psychologist*, 37, 1116-1123.
- Lynch, J. W., Davey-Smith, G., Kaplan G. A., & House, J. S. (2000). Income inequality and mortality: importance of individual income, psychosocial environment or material pathways in health. *British Medical Journal*, 320, 1200-1204.
- Martín R. G., García Lizana A., & Morales, A. F. (1989). La distribución territorial de la pobreza en España. CEBS: *La pobreza en España de los 80*. Madrid: Editorial ACEBO.
- Martínez López, R. (2007). Renta y privación en España desde una perspectiva dinámica. *Documento de trabajo 120/2007*. Fundación Alternativas.
- Martínez López, R. (2010). Pobreza y privación en España en el período 2004-2008: el auge económico al inicio de la recesión. *Documento de Trabajo 165/2010*. Fundación Alternativas.
- Mustard, C. A., Derksen, S., Berthelot, J. M., Wolfson, M., & Roos, L. L. (1997). Age-specific education and income gradients in morbidity and mortality in a Canadian province. *Social Science & Medicine*, 45, 383-397.
- Mustard, C. A., Vermeulen, M., & Lavis, J. N. (2003). Is position in the occupational hierarchy a determinant of decline in perceived health status? *Social Science & Medicine*, 57, 2291-2303.
- Noh, Y-H. (2009). Does unemployment increase suicide rates? The OECD panel evidence, *Journal of Economic Psychology*, 30, 575-582.
- Núñez V. J. J. (2009). Estado actual y nuevas aproximaciones a la medición de la pobreza". *Estudios de Economía Aplicada*, 27, 325-344.
- OECD (1997). Income distribution and poverty in selected OECD countries" in *OECD Economic Outlook*, 62, ABI/INFORM Global, 49-59.
- OECD (2007). *OECD Economic Surveys: France*.
- OECD (2009). *Employment Outlook 2009*.
- OECD (2011a). *Society at a Glance 2011: OECD Social Indicators*.
- OECD (2011b). *Factbook 2011: Economic, Environmental and Social Statistics*.
- Oliver, J., Ramos X., & Raymond-Bara, J. L. (2001). Recent trends in Spanish Income Distribution: a Robust Picture of Falling Income Inequality. *Working Papers, Universitat Autònoma de Barcelona. Departament d'Economia Aplicada*. nº 7.
- Pedersen, P. J. & Schmidt, T. D. (2010). Happiness in Europe cross-country differences in the determinants of satisfaction with main activity. *The Journal of Socio-Economics*, doi: 10.1016/j.socec.2010.10.004.
- Pedraza Avella, A. C. (2012). Exclusión social y empleo: ¿qué ocurre cuando hay segmentación laboral?. *Sociedad y Economía*, 22, 135-162.
- Romer, P. (2000). Poverty and macroeconomic activity. *Federal Reserve Bank of Kansas City Economic Review*, First Quarter: 1-13.
- Ruiz Castillo, J. (1987). La medición de la pobreza y de la desigualdad en España 1980-81. *Estudios Económicos*. Banco de España, nº 42.
- Ruiz Huerta, J. & Martínez, R. (1994). La pobreza en España: ¿Qué nos muestran las EPF?. *Documentación Social*, nº 96, julio-septiembre.
- Sapir, A. (2005). *Globalisation and the reform of European Social Models. Background document for the presentation at ECOFIN Informal Meeting in Manchester, 9 September 2005*. Bruegel. Brussels.

## Journal of Economics and Political Economy

- Sapir, A. (2005b). Globalisation and the reform of European Social Models. *Bruegel Policy Brief*. Issue 2005/1.
- Schmitz, H. (2010). Why are the unemployed in worse health? The causal effect of unemployment on health. *Labour Economics*, doi:10.1016/j.labeco.2010.08.005.
- Scutella, R. & Wooden, M. (2008). The effects of household joblessness on mental health. *Social Science & Medicine* 67, 88-100.
- Stavrova, O., Schlösser, T., & Fetchenhauer, D. (2010). Are the unemployed equally unhappy all around the world? The role of the social norms to work and welfare state provision in 28 OECD countries. *Journal of Economic Psychology*, doi: 10.1016/j.joep.2010.11.02.
- Stefansson, C. G. (1991). Long-term unemployment and mortality in Sweden, 1980-1986. *Soc. Sci. Med.*, 32, 419-423.
- Stuckler, D., Basu, S., Suhrcke, M., Coutts, A., & Mckee, M. (2009). The public health effect of economic crises and alternative policy responses in Europe: an empirical analysis. *The Lancet*, 374, 315-323.
- Svenson, P. G. (1987). International social and health policies to prevent ill health policies in the unemployed: The World Health Organization Perspective. *Soc. Sci. Med.* 25, 201-204.
- Tobin, J. (1994). Poverty in relation to macroeconomic trends, cycles and policies. *Confronting poverty: prescriptions for change*. Cambridge, MA: Harvard University Press.
- Winkelmann, L. & Winkelmann, R. (1995). Unemployment: Where does it hurt? *Discussion paper*, No. 1093. Centre for Economic Policy Research. London.
- Winkelmann, L. & Winkelmann, R. (1998). Why are the unemployed so unhappy? Evidence from panel data. *Economica*, 65, (257).

**TABLE 1:** *Income Inequality and Poverty*

	Mean	Median	Gini	Head Account Threshold*		
				30%	50%	60%
2007	13663.18	12047.62	0.3090	4.14%	12.88%	19.71%
2009	14047.06	12514.96	0.3049	5.18%	13.02%	19.56%

**Note:** \* Share of the population whose income is below the poverty line established as percentage of median equivalized income

**TABLE2:** *Probability of being income poor*

	2007		2009	
	Coefficients (Robust Std. errors )	Marginal Effects	Coefficients (Robust Std. errors )	Marginal Effects
Age	0.0182** (0.00755)	0.0033	0.0429*** (0.00770)	0.0095
Age Square	-0.000316*** (8.97e-05)	-0.00006	-0.000608*** (9.20e-05)	-0.0001
Female	-0.0561* (0.0286)	-0.0103	-0.0424 (0.0281)	-0.0094
Married or cohabiting	-0.0589 (0.0375)	-0.0108	-0.0263 (0.0387)	-0.0058
Sep. Divorced	0.370*** (0.0678)	0.0821	0.300*** (0.0644)	0.0759
Widow	-0.524*** (0.109)	-0.0685	-0.265** (0.121)	-0.051
Secondary	-0.200*** (0.0371)	-0.0344	-0.282*** (0.0369)	-0.0586
High School	-0.390*** (0.0405)	-0.0632	-0.458*** (0.0405)	-0.0894
Tertiary	-0.618*** (0.0429)	-0.0955	-0.676*** (0.0439)	-0.1287
Part time	0.225*** (0.0514)	0.0462	0.394*** (0.0559)	0.1037
Temporary contract	0.162*** (0.0311)	0.0309	0.124*** (0.0337)	0.0285
Self-employed with employees	0.864*** (0.0637)	0.2392	0.994*** (0.0634)	0.3190
Self-employed without employees	0.855*** (0.0435)	0.2279	0.866*** (0.0455)	0.2631
Unemployed previously self –employed	-0.304 (0.199)	-0.0456	0.298** (0.141)	0.0769
Unemployed previously employed	0.253*** (0.0573)	0.0527	0.299*** (0.0531)	0.0746
Unemployed never employed before	0.784*** (0.116)	0.2137	0.909*** (0.120)	0.2902
Unemployed>6 months	0.527***	0.1234	0.555***	0.1521



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	(0.0501)		(0.0529)	
Inactive	0.675***	0.1475	0.719***	0.1902
	(0.0335)		(0.0361)	
Galicia	0.0858	0.0164	0.112**	0.0262
	(0.0640)		(0.0568)	
Principality of Asturias	-0.167*	-0.0276	-0.0871	-0.0185
	(0.0873)		(0.0726)	
Cantabria	-0.322***	-0.0480	0.0254	0.0057
	(0.0944)		(0.0836)	
Basque Country	-0.156**	-0.0260	-0.188**	-0.0379
	(0.0736)		(0.0739)	
Foral Community of Navarre	-0.440***	-0.0607	-0.462***	-0.0789
	(0.0933)		(0.0899)	
La Rioja	0.104	0.0203	0.192***	0.0471
	(0.0846)		(0.0745)	
Aragón	0.0139	0.0026	-0.115	-0.0241
	(0.0785)		(0.0782)	
Castile and León	0.151**	0.0301	-0.0361	-0.0079
	(0.0678)		(0.0658)	
Castile-La Mancha	0.288***	0.0615	0.248***	0.0618
	(0.0682)		(0.0664)	
Extremadura	0.663***	0.1706	0.416***	0.1121
	(0.0674)		(0.0735)	
Catalonia	-0.118*	-0.0205	-0.174***	-0.0361
	(0.0617)		(0.0560)	
Valencia Community	-0.00319	-0.0006	-0.0331	-0.0072
	(0.0641)		(0.0587)	
Balearic Islands	-0.0372	-0.0067	0.0179	0.0040
	(0.0841)		(0.0814)	
Andalusia	0.248***	0.0499	0.390***	0.0983
	(0.0573)		(0.0509)	
Region of Murcia	0.280***	0.0598	0.295***	0.0753
	(0.0688)		(0.0661)	
Canary Island	0.372***	0.0828	0.357***	0.0932
	(0.0684)		(0.0739)	
Constant	-1.543***		-1.839***	
	(0.159)		(0.151)	
Observations	28,067		23,360	

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**TABLE 3:** Probit model on the capacity to face up unexpected expenses

	2007		2009	
	Coefficients (Robust Std. errors )	Marginal Effects	Coefficients (Robust Std. errors )	Marginal Effects
Age	0.0414*** (0.00670)	0.0130	0.0486*** (0.00715)	0.0168
Age Square	-0.000549*** (8.04e-05)	-0.0002	-0.000693*** (8.46e-05)	-0.0002
Female	-0.0501** (0.0250)	-0.0158	-0.0196 (0.0256)	-0.0068
Married or cohabiting	-0.363***	-0.1164	-0.144***	-0.0500

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	(0.0336)		(0.0347)	
Sep. Divorced	0.286***	0.0972	0.375***	0.1392
	(0.0631)		(0.0621)	
Widow	-0.0191	-0.0059	-0.0134	-0.0046
	(0.0944)		(0.0960)	
Secondary	-0.292***	-0.0875	-0.331***	-0.1097
	(0.0329)		(0.0347)	
High School	-0.612***	-0.1708	-0.659***	-0.2039
	(0.0351)		(0.0381)	
Tertiary	-1.035***	-0.2683	-1.119***	-0.3250
	(0.0384)		(0.0407)	
Part time	0.208***	0.0691	0.177***	0.0637
	(0.0442)		(0.0492)	
Temporary contract	0.189***	0.0611	0.250***	0.0890
	(0.0269)		(0.0302)	
Self-employed with employees	-0.315***	-0.0884	-0.300***	-0.0953
	(0.0769)		(0.0724)	
Self-employed without employees	-0.0914**	-0.0280	-0.106**	-0.0357
	(0.0439)		(0.0474)	
Unemployed previously self employed	0.960***	0.3612	0.566***	0.2160
	(0.216)		(0.140)	
Unemployed previously employee	0.343***	0.1177	0.345***	0.1263
	(0.0501)		(0.0457)	
Unemployed never employee before	0.451***	0.1603	0.822***	0.3165
	(0.114)		(0.119)	
Unemployed>6 months	0.189***	0.0624	0.200***	0.0719
	(0.0444)		(0.0476)	
Inactive	0.0701**	0.0223	0.103***	0.0360
	(0.0306)		(0.0344)	
Galicia	-0.145***	-0.0436	-0.0324	-0.0111
	(0.0533)		(0.0512)	
Principality of Asturias	-0.222***	-0.0644	-0.464***	-0.1389
	(0.0671)		(0.0688)	
Cantabria	-0.493***	-0.1275	-0.279***	-0.0889
	(0.0853)		(0.0796)	
Basque Country	-0.272***	-0.0780	-0.172***	-0.0569
	(0.0664)		(0.0637)	
Foral Community of Navarre	-0.433***	-0.1152	-0.686***	-0.1871
	(0.0744)		(0.0783)	
La Rioja	-0.166**	-0.0492	-0.327***	-0.1024
	(0.0743)		(0.0702)	

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Aragón	-0.772*** (0.0865)	-0.1772	-0.608*** (0.0738)	-0.1725
Castile and León	-0.328*** (0.0584)	-0.0921	-0.356*** (0.0589)	-0.1116
Castile-La Mancha	-0.178*** (0.0637)	-0.0527	-0.188*** (0.0647)	-0.0620
Extremadura	-0.184*** (0.0640)	-0.0544	-0.351*** (0.0661)	-0.1093
Catalonia	0.00148 (0.0487)	0.0005	0.111** (0.0478)	0.0391
Valencia Community	-0.102* (0.0524)	-0.0311	0.0623 (0.0515)	0.0218
Balearic Island	-0.197*** (0.0747)	-0.0579	-0.0235 (0.0752)	-0.0081
Andalusia	0.182*** (0.0470)	0.0593	0.172*** (0.0462)	0.0611
Region of Murcia	0.0986* (0.0591)	0.0320	0.182*** (0.0650)	0.0656
Canary Island	0.539*** (0.0578)	0.1930	0.539*** (0.0613)	0.2039
Constant	-0.711*** (0.133)		-0.770*** (0.143)	
Observations	28,067		23,360	

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**TABLE 4:** *Probit model on the delays in payment of mortgage or rent in the last 12 months*

	2007		2009	
	Coefficients (Robust Std. errors )	Marginal Effects	Coefficients (Robust Std. errors )	Marginal Effects
Age	-0.00171 (0.0127)	-0.0001	0.0247** (0.0115)	0.0022
Age Square	-0.000159 (0.000153)	0.00001	-0.000533*** (0.000138)	0.00005
Female	-0.00321 (0.0398)	-0.0002	-0.00115 (0.0395)	-0.0001
Married or cohabiting	0.0355 (0.0594)	0.0023	0.253*** (0.0574)	0.0226
Sep. Divorced	0.569*** (0.0908)	0.0590	0.499*** (0.0883)	0.0652
Widow	-0.381** (0.150)	-0.0173	-0.408** (0.184)	-0.0264
Secondary	-0.0334 (0.0498)	-0.0021	-0.196*** (0.0515)	-0.0166
High School	-0.101* (0.0550)	-0.0062	-0.228*** (0.0558)	-0.0187
Tertiary	-0.372*** (0.0614)	-0.0208	-0.593*** (0.0632)	-0.0445
Part time	0.0143	0.0009	0.239***	0.0258

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	(0.0658)		(0.0726)	
Temporary contract	0.117***	0.0079	0.127***	0.0122
	(0.0444)		(0.0457)	
Self-employed with employees	0.324***	0.0279	0.215**	0.0231
	(0.112)		(0.0927)	
Self-employed without employees	0.201***	0.0152	0.194***	0.0203
	(0.0678)		(0.0701)	
Unemployed previously self employed	-0.127	-0.0073	0.475***	0.0635
	(0.292)		(0.167)	
Unemployed previously employee	0.262***	0.0210	0.251***	0.0268
	(0.0750)		(0.0681)	
Unemployed never employee before	-0.0801	-0.0048	0.311*	0.0365
	(0.211)		(0.159)	
Unemployed>6 months	-0.0415	-0.0026	0.109	0.0107
	(0.0700)		(0.0674)	
Inactive	0.00523	0.0003	0.0445	0.0041
	(0.0515)		(0.0542)	
Galicia	-0.389***	-0.0182	-0.428***	-0.0281
	(0.100)		(0.0936)	
Principality of Asturias	-0.245*	-0.0126	-0.344***	-0.0235
	(0.135)		(0.106)	
Cantabria	0.0745	0.0052	-1.191***	-0.0422
	(0.142)		(0.235)	
Basque Country	-0.0300	-0.0019	-0.373***	-0.0253
	(0.120)		(0.0975)	
Foral Community of Navarre	0.294***	0.0249	-0.112	-0.0093
	(0.103)		(0.123)	
La Rioja	0.128	0.0093	-0.133	-0.0108
	(0.129)		(0.113)	
Aragón	-0.103	-0.0061	-0.488***	-0.0298
	(0.138)		(0.118)	
Castile and León	-0.0275	-0.0017	-0.300***	-0.0216
	(0.0977)		(0.0984)	
Castile-La Mancha	-0.0269	-0.0017	-0.156	-0.0125
	(0.0984)		(0.0955)	
Extremadura	-0.353***	-0.0166	-1.044***	-0.0418
	(0.108)		(0.142)	
Catalonia	0.0531	0.0035	-0.210***	-0.0169
	(0.0787)		(0.0696)	
Valencia Community	0.0142	0.0009	0.141*	0.0141

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	(0.0845)		(0.0723)	
Balearic Island	0.241**	0.0193	0.363***	0.0441
	(0.0981)		(0.0977)	
Andalusia	-0.00362	-0.0002	-0.333***	-0.0253
	(0.0766)		(0.0687)	
Region of Murcia	0.112	0.0080	0.0688	0.0066
	(0.0952)		(0.108)	
Canary Island	0.0947	0.0066	0.0428	0.0040
	(0.0920)		(0.0892)	
Constant	-1.544***		-1.588***	
	(0.236)		(0.222)	
Observations	28,067		23,360	

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**TABLE 5:** *Probit model on the difficulties in accessing medical and dental visits-treatments*

	2007		2009	
	Coefficients (Robust Std. errors )	Marginal Effects	Coefficients (Robust Std. errors )	Marginal Effects
Age	0.0507*** (0.0167)	0.0020	0.0806*** (0.0119)	0.0060
Age Square	-0.000497*** (0.000187)	0.00002	-0.000939*** (0.000139)	-0.0001
Female	-0.0530 (0.0505)	-0.0016	0.00130 (0.0436)	0.0001
Married or cohabiting	-0.0341 (0.0840)	-0.0002	-0.0638 (0.0586)	-0.0048
Sep. Divorced	0.425*** (0.111)	0.0275	0.418*** (0.0818)	0.0432
Widow	-0.0534 (0.150)	0.0005	0.0242 (0.127)	0.0018
Secondary	-0.0456 (0.0544)	-0.0020	-0.194*** (0.0524)	-0.0134
High School	-0.354*** (0.0634)	-0.0132	-0.273*** (0.0567)	-0.0179
Tertiary	-0.536*** (0.0836)	-0.0198	-0.632*** (0.0687)	-0.0381
Part time	0.127 (0.0823)	0.0058	0.214** (0.0846)	0.0188
Temporary contract	0.152*** (0.0510)	0.0076	0.0798 (0.0504)	0.0061
Self-employed with employees	-0.222 (0.144)	-0.0081	-0.455*** (0.131)	-0.0230
Self-employed without employess	-0.0548 (0.0911)	-0.0028	0.0119 (0.0802)	0.0009
Unemployed previously self –employed	0.458 (0.406)	0.0304	0.723*** (0.173)	0.0992
Unemployed previously employee	0.199** (0.0922)	0.0092	0.264*** (0.0703)	0.0235

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Unemployed never employee before	0.594*** (0.157)	0.0422	0.163 (0.182)	0.0140
Unemployed>6 months	0.0601 (0.0739)	0.0033	0.196*** (0.0690)	0.0168
Inactive	0.198*** (0.0633)	0.0058	0.109* (0.0572)	0.0085
Galicia	-0.144 (0.114)	0.0218	-0.264*** (0.0843)	-0.0158
Principality of Asturias	-0.231* (0.137)	-0.0070	-0.441*** (0.123)	-0.0223
Cantabria	-0.192 (0.179)	-0.0086	-0.708*** (0.180)	-0.0283
Basque Country	-0.251* (0.147)	-0.0068	-0.673*** (0.126)	-0.0290
Foral Community of Navarre	-0.144 (0.153)	-0.0094	-0.439*** (0.128)	-0.0220
La Rioja	-0.370*** (0.138)	-0.0053	-0.329*** (0.115)	-0.0181
Aragón	0.0730 (0.132)	-0.0121	-0.483*** (0.131)	-0.0237
Castile and León	0.0387 (0.117)	0.0036	-0.180* (0.0947)	-0.0115
Castile-La Mancha	-0.133 (0.126)	0.0014	-0.188* (0.104)	-0.0119
Extremadura	-0.431*** (0.144)	-0.0057	-0.653*** (0.126)	-0.0277
Catalonia	-0.0443 (0.104)	-0.0134	-0.258*** (0.0803)	-0.0164
Valencia Community	-0.0242 (0.108)	-0.0018	-0.0878 (0.0789)	-0.0061
Balearic Island	-0.197 (0.154)	-0.0023	-0.176 (0.111)	-0.0112
Andalusia	0.153 (0.0993)	-0.0069	-0.336*** (0.0750)	-0.0206
Region of Murcia	0.173 (0.122)	0.0063	-0.744*** (0.119)	-0.0298
Canary Island	0.199 (0.122)	0.0087 0.0109	0.107 (0.0945)	0.0087
Constant	-3.028*** (0.354)		-2.948*** (0.247)	
Observations	28,067		23,360	

Notes: \*\*\* p<0.01, \*\* p<0.05, \* p<0.1



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